

## CLAIMS

What is claimed is:

- 5 1. A signaling method for line terminal equipment health and status information comprising the steps of:  
providing at least first and second line terminal  
equipment (LTEs);  
transmitting by said at least first and second line  
10 terminal equipment a health and status information to a  
plurality of bearer payload processors (BPPs); and  
collecting by each of said plurality of BPPs the health  
and status information from the at least first and second  
LTEs.
- 15 2. The signaling method as claimed in claim 1, wherein  
there is further included a step of receiving by the plurality  
of BPPs the health and status information of the at least  
first and second LTEs.
- 20 3. The signaling method as claimed in claim 1, wherein  
there is further included a step of concatenating by each of  
the plurality of BPPs the health and status information of the  
at least first and second LTEs.
- 25 4. The signaling method as claimed in claim 3, wherein  
there is further included a step of broadcasting by each of  
the plurality of BPPs the concatenated health and status  
information to each of the at least first and second LTEs.
- 30 5. The signaling method as claimed in claim 4, wherein  
there is further included a step of comparing by each of the  
plurality of BPPs the concatenated health and status  
information of the at least first and second LTEs.

6. The signaling method as claimed in claim 4, wherein there is further included a step of comparing by each LTE the concatenated health and status information of the at least first and second LTEs.

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7. The signaling method as claimed in claim 4, wherein the step of transmitting by said at least first and second line terminal equipment the health and status information includes a step of transmitting the health and status information

10 included with bearer traffic.

8. A signaling method for line terminal equipment health and status information comprising the steps of:

providing at least first and second line terminal equipment (LTEs);

5 receiving by a plurality of bearer payload processors (BPPs) health and status information of the at least first and second line terminal equipment; and

concatenating by each of the plurality of BPPs the health and status information of the at least first and second  
10 LTEs.

9. The signaling method as claimed in claim 8, wherein there is further included a step of transmitting by the at least first and second line terminal equipment the health and  
15 status information to the plurality of BPPs.

10. The signaling method as claimed in claim 8, wherein there is further included a step of broadcasting by each of the plurality of BPPs the concatenated health and status  
20 information to each of the at least first and second LTEs.

11. The signaling method as claimed in claim 10, wherein there is further included a step of comparing by each of the plurality of BPPs the concatenated health and status  
25 information of the at least first and second LTEs.

12. The signaling method as claimed in claim 10, wherein there is further included a step of comparing by each LTE the concatenated health and status information of the at least  
30 first and second LTEs.

13. The signaling method as claimed in claim 8, wherein there is further included a step of transmitting the health and status information included with bearer traffic.

14. A signaling method for line terminal equipment health and status information comprising the steps of:

- 5 providing at least first and second line terminal equipment (LTEs);
- receiving by a plurality of bearer payload processors (BPPs) health and status information of the at least first and second line terminal equipment; and
- 10 comparing by each of the plurality of BPPs the health and status information received from the at least first and second LTEs.

15. The signaling method as claimed in claim 14, wherein there is further included a step of comparing by each LTE the health and status information of the at least first and second LTEs.

16. The signaling method as claimed in claim 14, wherein there is further included a step of transmitting by the at least first and second line terminal equipment the health and status information to the plurality of BPPs.

17. The signaling method as claimed in claim 14, wherein there is further included a step of concatenating by each of the plurality of BPPs the health and status information of the at least first and second LTEs.

18. The signaling method as claimed in claim 17, wherein there is further included a step of broadcasting by each of the plurality of BPPs the concatenated health and status information to each of the at least first and second LTEs.

19. The signaling method as claimed in claim 18, wherein the step of broadcasting further includes a step of transmitting the concatenated health and status information of

the at least first and second LTEs included with bearer traffic.

20. The signaling method as claimed in claim 14, wherein  
5 there is further included a step of transmitting the health and status information included with bearer traffic.